



ENERGY



**WE
ALWAYS
FIND A WAY
TO DELIVER**

PIONEERING SINCE 1919



CLOUGH AT A GLANCE

CLOUGH IS A PIONEERING ENGINEERING AND CONSTRUCTION COMPANY. WE HAVE BEEN HELPING OUR CLIENTS REALISE THEIR VISION SINCE 1919, BUILDING ICONIC ENERGY, RESOURCES AND INFRASTRUCTURE PROJECTS AROUND THE WORLD.

Clough delivers challenging projects for the energy, resources, and infrastructure industries underpinned by a dedication to problem solving and getting the job done safely and efficiently. Today, Clough manages a global workforce of over 2,000 people from operating centres across Australia, North America, Papua New Guinea, Asia, Africa, and the UK that strive for the best in everything they do, setting new safety and performance benchmarks every single day.

Clough is a wholly owned subsidiary of Murray & Roberts, a multinational group that focusses its expertise on delivering sustainable and fit-for-purpose project engineering, procurement, construction, commissioning, operations and maintenance solutions. The Group delivers its capabilities into three global market sectors: underground mining, energy, resources and infrastructure, and power & water.

Our organisational philosophy is represented through our principles, and is continually reflected in our culture, conduct, and performance.

+ 2,000

Projects completed to date across the globe

+ 2,000

Global employees

101

Years in operation - established in 1919

+ 150

Energy projects successfully delivered

54

Years' experience in Energy

35

Years' experience in LNG

CLOUGH HAS SUCCESSFULLY COMPLETED OVER 150 ENERGY PROJECTS AROUND THE WORLD.



HIGH VALUE ENERGY SERVICES

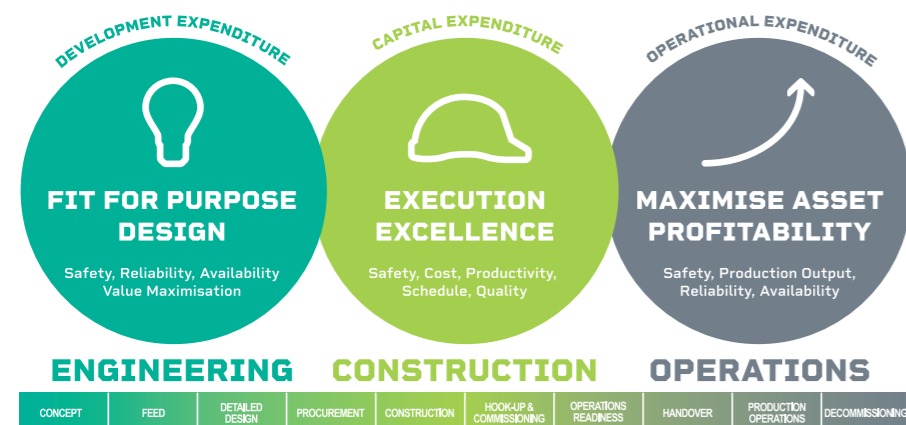
OVER TIME WE HAVE DEVELOPED HIGH VALUE SKILLS TO SUPPORT THE COMPLEX AND GLOBAL NATURE OF THE INDUSTRY. TODAY WE SPECIALISE IN THE DELIVERY OF PROJECT MANAGEMENT, 3D DESIGN, SOPHISTICATED PROCESS ENGINEERING, MODULAR CONSTRUCTION, COMMISSIONING SERVICES, AND BROWNFIELD ENGINEERING, OPERATIONS AND MAINTENANCE SERVICES FOR ENERGY PROJECTS OF ALL SIZES AND COMPLEXITIES.

We aim to maximise the value of our clients' projects through our expertise in project execution, cost efficiency and enhanced productivity performance.

Clough provides services across three key phases of the asset lifecycle – engineering, construction and operations. These functions deliver high value services to clients operating in the energy, resources, and infrastructure sectors.

Services Across the Asset Lifecycle

Clough reduces project risk by providing a complete engineering and project services solution that spans the full asset lifecycle. We engineer to construct, and construct to commission, operate and maintain facilities, optimising safety, productivity and cost across every phase of a project. This project execution expertise has been developed through our work on some of the world's most logistically challenging energy and resources projects, and provides a fresh approach for clients looking for a new way of contracting.



ENGINEERING



ENGINEERING

Concept, FEED, Detailed Design & EPCM

Front End Engineering Design

Detailed Design

Engineering, Procurement, Construction and Project Management (EPCM)

Project Management Consultant (and Services)

Multi-discipline engineering including Process, Civil and Structural, EC&I, Near Shore Marine, Mechanical and Piping

Brownfield Engineering

CONSTRUCTION



ONSHORE & OFFSHORE CONSTRUCTION

Fully integrated EPC, D&C, and Construct-only solutions

Procurement & Fabrication

Integrated partnerships and alliances

Small Scale LNG Facilities

Process Facilities

Power Generation

Gas Plants & Compression Facilities

Pipelines

Civil Infrastructure

Roads and Bridges

Control Systems

OPERATIONS



COMMISSIONING

Onshore & Offshore Hook-up, and Commissioning

Completion Services

Hook-up Services

Onshore and Offshore Pre-commissioning and Commissioning

Supply of Technical Trades

Hazardous Area Inspection

Asian Fabrication Yard Support



CONSULTANCY

Engineering studies and support to define and optimise assets

Concept Evaluation

Feasibility Studies

Basis of Design

Regulatory Approvals

Specialised Process Engineering Design

Process Optimisation and Debottlenecking



NEAR SHORE MARINE

Import & Export Jetties & Terminals, Port Developments

Import and Export Jetties

Jetty Topsides

Ports and Harbour Infrastructure

Quay Walls

Material Offloading Facilities (MOF)

Intake and Outfall Structures

Regasification Terminals

Near Shore Pipelines

Tug Pens

Supply Bases

Marine Engineering



BROWNFIELDS

Asset Operations, Maintenance, and Optimisation Solutions

Reliability Modelling

Maintenance Management and Execution

Shutdowns and Turnarounds

Operational Readiness

Supply Chain Management

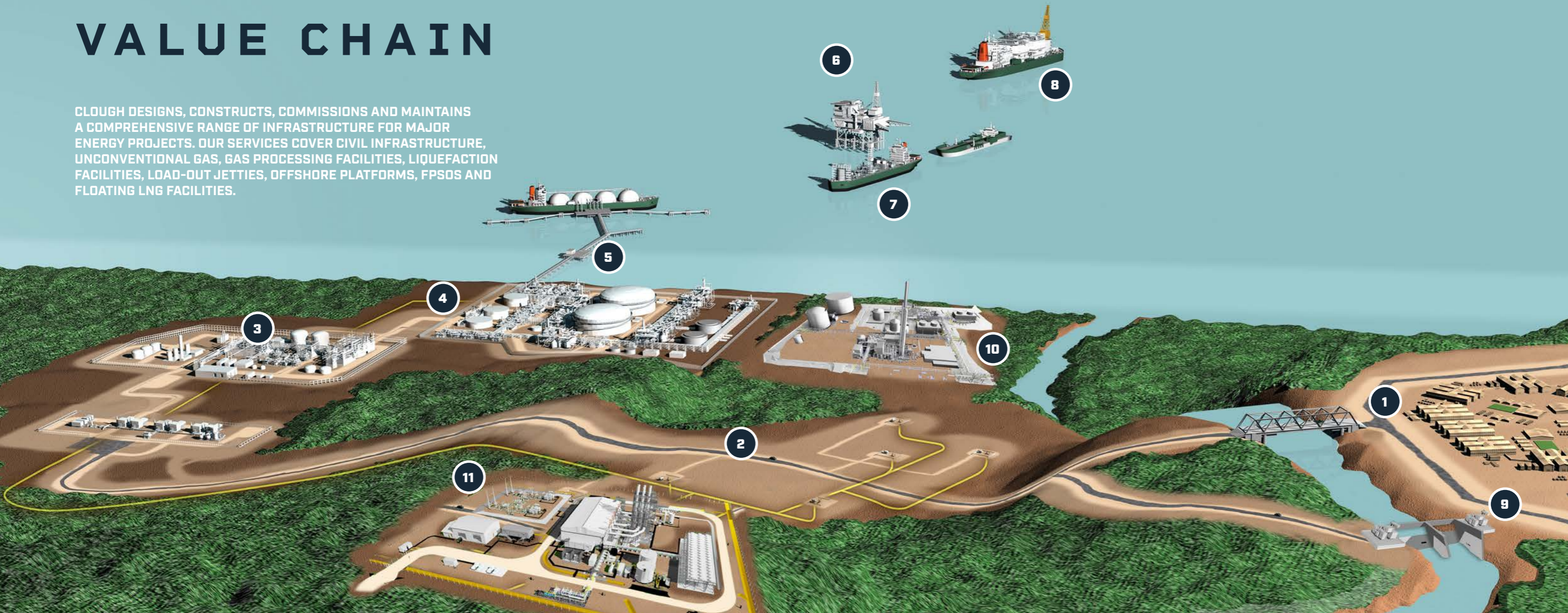
Operations Maintenance Staff

Competency Assurance and Training

Decommissioning

ENERGY VALUE CHAIN

Clough designs, constructs, commissions and maintains a comprehensive range of infrastructure for major energy projects. Our services cover civil infrastructure, unconventional gas, gas processing facilities, liquefaction facilities, load-out jetties, offshore platforms, FPSOs and floating LNG facilities.



1 CIVIL INFRASTRUCTURE

Roads, bridges, wharves, camps and airports provide critical access to remote Energy project sites. Clough designs and constructs fit for purpose civil infrastructure for Energy projects located in remote and challenging environments.

2 UNCONVENTIONAL GAS

Clough designs, constructs, commissions and maintains upstream infrastructure for coal seam gas and shale gas projects, including gas gathering systems, processing and compression facilities and gas and water pipeline and plant.

3 GAS PROCESSING PLANTS

Since the early 1980s, Clough has been delivering full turnkey services to gas processing plants, including Conceptual and Front End Engineering Design, EPC/EPCM, modularisation, fabrication, construction commissioning, production operations services and control systems.

4 LIQUEFACTION FACILITIES

Clough provides design, project management, construction, commissioning, process optimisation, debottlenecking and maintenance services to liquefaction facilities.

5 LNG LOADOUT JETTIES

Clough has 50 years of experience in the delivery of import and export jetties, jetty topsides, ports and harbour infrastructure, quay walls, MOFs, near shore pipelines, intake and outfall structures, tug pens, regasification terminals and supply bases.

6 OFFSHORE PLATFORMS

Clough has been providing engineering and project management services to the offshore sector for more than 30 years. Today we design, fabricate, transport, commission, and provide production operations support for offshore platforms.

7 FPSOS

Clough provides project management, engineering, procurement, fabrication, hook-up, commissioning and long-term production operations support to Floating Production, Storage and Offloading (FPSO) projects and through Booth Welsh offer a specialised capability in FPSO control systems.

8 FLOATING LNG

Groundbreaking floating LNG (FLNG) technology is the next step in the evolution of the LNG industry. Clough has developed high value engineering, project management, commissioning and brownfield services to support FLNG requirements.

9 RENEWABLES

Clough delivers innovative EPC solutions to the evolving renewable energy market, with a capability that includes hydro power, wind power, and solar power.

10 PETROCHEMICALS

Clough delivers major greenfield and brownfield petrochemical projects with a capability that spans the full spectrum of EPC services, from concept and front-end engineering design through to detailed design, procurement, fabrication, construction and commissioning.

11 POWER STATIONS

Clough provides EPC solutions to deliver power station projects ranging from peak, base load and stand-by facilities to gas, biomass and cogeneration or hydroelectric plants.

+50 YEARS IN ENERGY

IN 1964 CLOUGH WAS AWARDED ITS FIRST ENERGY PROJECT, WHICH HELPED TO DELIVER WESTERN AUSTRALIA'S FIRST MAJOR OIL DEVELOPMENT. THIS PROJECT SET THE TONE FOR CLOUGH'S FUTURE, AND TODAY THE COMPANY HAS A TRACK RECORD OF ENERGY PROJECT DELIVERY SPANNING OVER 50 YEARS.

OVER TIME THE COMPANY HAS DEVELOPED A REPUTATION AS A SPECIALIST IN THE DELIVERY OF TECHNICALLY AND LOGISTICALLY CHALLENGING PROJECTS.

Current and Recent Projects

Project Traveller

Pasadena, Texas
Engineering, procurement, construction, commissioning and start-up contract for a petrochemical facility.



LNG Canada

LNG Canada, British Columbia
EPC for the 1.75-kilometre-long loadout line trestle for the LNG Canada project.



PDM Power Station

NiuPower, Papua New Guinea
Engineering, procurement, and construction contract to develop the PDM Power Station.



Snowy 2.0

Snowy Hydro, New South Wales
Civil and Electro-Mechanical works for the Snowy 2.0 Project.



Ethylene Dehydration Unit

Enterprise Products Company, Texas, USA
Engineering, Procurement and Construction necessary to install facilities and equipment for a new ethylene storage and dehydration system.



Ichthys LNG Project IPMS

INPEX Browse Ltd, Western Australia
Provision of Offshore Integrated Project Management Support Services (IPMS).



Ichthys LNG Hook-up and Commissioning
Samsung Heavy Industries / Daewoo Shipbuilding & Marine Engineering (DSME), Western Australia
Hook-up services of the Central Processing Facility and Floating, Production, Storage and Offloading facility.



2018

Wheatstone Hook-up and Commissioning
Chevron Australia Pty Ltd, Western Australia
Pre-commissioning, commissioning of integrated float over deck systems, offshore hook-up, and start-up assistance.



2017

Gorgon Project Downstream LNG EPCM

Chevron Australia Pty Ltd
Western Australia
EPCM, as part of KJVJG, for all downstream facilities on the Chevron-operated Gorgon Project.



2016

Wheatstone Product Loading Facility and Tug Berths

Chevron Australia Pty Ltd
Western Australia
Design and construction of a 1.2 kilometre jetty.



Karratha Gas Plant Life Extension Marine Installation Services

Woodside Energy Ltd
Karratha, Western Australia
Marine Installation Services for the Integrated Marine Lift Campaign.



2015

Ichthys Material Offloading Facility (MOF) & Product Loading Facility (Jetty)

INPEX Operations Australia (through JKC JV)
Darwin, Northern Territory
Design and construction of the MOF and Jetty.



Gladstone LNG K128 Project

Fluor (for Santos), Gladstone, Queensland
Construction of over 400km of gas and water pipelines, two compression facilities, and camps.



2014

PNG LNG Project Hides Gas Conditioning Plant

ExxonMobil PNG Limited
Papua New Guinea
EPC for the gas conditioning plant, nearby wellheads and associated piping and infrastructure.



2013

PNG LNG Project Upstream Infrastructure

ExxonMobil PNG Limited
Papua New Guinea
Construction of critical infrastructure for the PNG LNG project.



PNG LNG Project Marine Jetty

Chiyoda JGC Joint Venture
Papua New Guinea
Design and construction of the LNG and condensate offloading jetty for the PNG LNG project.



2012

Macedon Gas Project - Onshore Pipelines

BHP Billiton, Western Australia
Construction and installation of onshore pipelines and associated umbilical and cable installation.



2010

Devil Creek Development Project - EPF

Apache Energy (now Quadrant Energy), Western Australia
Engineering, design works, procurement of and fabrication of all modules for the onshore facility.



2009

Mars Phase 2A Project

Apache Energy (now Quadrant Energy)
Varanus Island, Western Australia
Installation of a solar compressor with associated pipe work and instrumentation on the existing Varanus Island plant.



2009

Pluto LNG Jetty

Woodside Energy Ltd
Karratha, Western Australia
Construction of a 300m long approach jetty.



2008

Angel Topsides Floatover Transportation and Installation

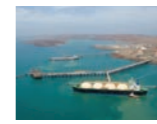
Woodside Energy Ltd
Western Australia
Installation engineering and construction activities for transportation and installation of the 7,000 tonne Angel topside module, as well as hook-up of the topside module to the pre-installed jacket.



2005

Woodside LNG Jetty - Train V Expansion

Woodside Energy Ltd
Western Australia
Construction of a second LNG loading berth at Woodside's Karratha onshore gas plant.



2004

BassGas Project

Origin Energy
Bass Strait, Australia
EPCIC of an offshore production platform, subsea and onshore pipelines and onshore gas plant.



LNG Expansion Project - EPCM, Phase IV

Woodside Energy Ltd
Western Australia
EPCM for the expansion of the North West Shelf's LNG facilities.



Bayu-Undan Hook-Up and Commissioning

ConocoPhillips Australia
Timor Sea
Commissioning of the wellhead platform, topsides the entire field production systems.



2003

Sawan Gas Field Development

OMV Pakistan
Thar Desert, Pakistan
EPCC contract for a gas plant consisting of two process trains, and all associated infrastructure.



2002

Lakshmi Gas Field Development

Cairn Energy India Pty Ltd, India
EPCIC for two topsides of Wellhead Platforms, Submarine Pipelines and Onshore Terminal facilities.



Roma to Brisbane Pipeline

Agility
Queensland
EPC services for duplication (looping) of existing Roma to Brisbane pipeline.



PNG Oil Refinery Project

InterOil
Papua New Guinea
EPCC of PNG's first oil refinery project.



2000

Wesfarmers LPG Plant Upgrade

Wesfarmers LPG
Western Australia
Design, procurement, construction and commissioning of a fast track expansion of the existing Wesfarmers LPG plant.



1999

Sales Gas Line

Apache Energy (now Quadrant Energy)
Varanus Island, Western Australia
Design, installation and pre-commissioning of a 16" sales gas line between Varanus Island and the mainland.



1996

East Spar Development

WMC Petroleum
Varanus Island, Western Australia
EPCIC for two-well subsea development, pipeline and two gas plant trains on Varanus Island. The project was awarded Australia's top engineering honour, the Sir William Hudson Award.



1994

Dhodak Field Gas Condensation Plant

Pakistan Oil & Gas Development Corporation
Pakistan
EPC contract for the gas condensate processing facilities in the Dhodak field, Pakistan.



1993

Pagerungan Besar Gas Field Development Project

Atlantic Richfield Indonesia Inc., Indonesia
EPC contract for a major gas field development project on Pagerungan Besar Island.



1989

North West Shelf LNG Project

Woodside Energy Ltd
Western Australia
Insulation of offplot pipework at Woodside's LNG plant.



1988

Wesfarmers LPG Natural Gas to Liquids Plant

Wesfarmers
Kwinana, Western Australia
Clough's first turnkey gas processing contract, the Wesfarmers LPG natural gas to liquids plant, is completed, Clough's first turnkey gas processing contract.



1987

North West Shelf LNG and Condensate Jetty

Woodside Offshore Petroleum Pty Ltd
Western Australia
Construction of Australia's first LNG and Condensate Load Out Jetty.



1982

North Rankin 'A'

Woodside Offshore Petroleum Pty Ltd
Western Australia
Award of Woodside's North Rankin 'A', Clough's first major offshore construction project.



1966

Barrow Island Oilfield Development

Western Australian Petroleum, Western Australia
Awarded the Barrow Island Oilfield Development, Western Australia's first significant petroleum resource development.



1964

The Harbourworks Clough Joint Venture is formed (today BAM Clough).

OUR PRESENCE

CLOUGH OPERATIONS SPAN FOUR KEY REGIONS AND MULTIPLE INTERNATIONAL SUBSIDIARIES AND PARTNERSHIPS TO FORM A GLOBAL NETWORK OF OPERATING CENTRES THAT BRING TOGETHER HIGHLY SPECIALISED TECHNICAL SERVICES WITH HIGH VALUE ENGINEERING CENTRES.



CLOUGH'S GROUP OF COMPANIES

- CLOUGH
- MURRAY & ROBERTS
- BOOTH WELSH
- CH-IV
- E2O
- GCR MONGOLIA
- PSI CLOUGH
- CLOUGH MURRAY & ROBERTS

CLOUGH'S GROUP OF COMPANIES



Clough is a wholly owned subsidiary of Murray & Roberts (M&R), South Africa's leading engineering and construction services company. M&R has delivered infrastructure for more than 110 years and has a global workforce of over 20,000 people.



Established in 1989, Booth Welsh is recognised as a market leader in lifecycle services for control systems, from front end engineering design through to service and replacement.

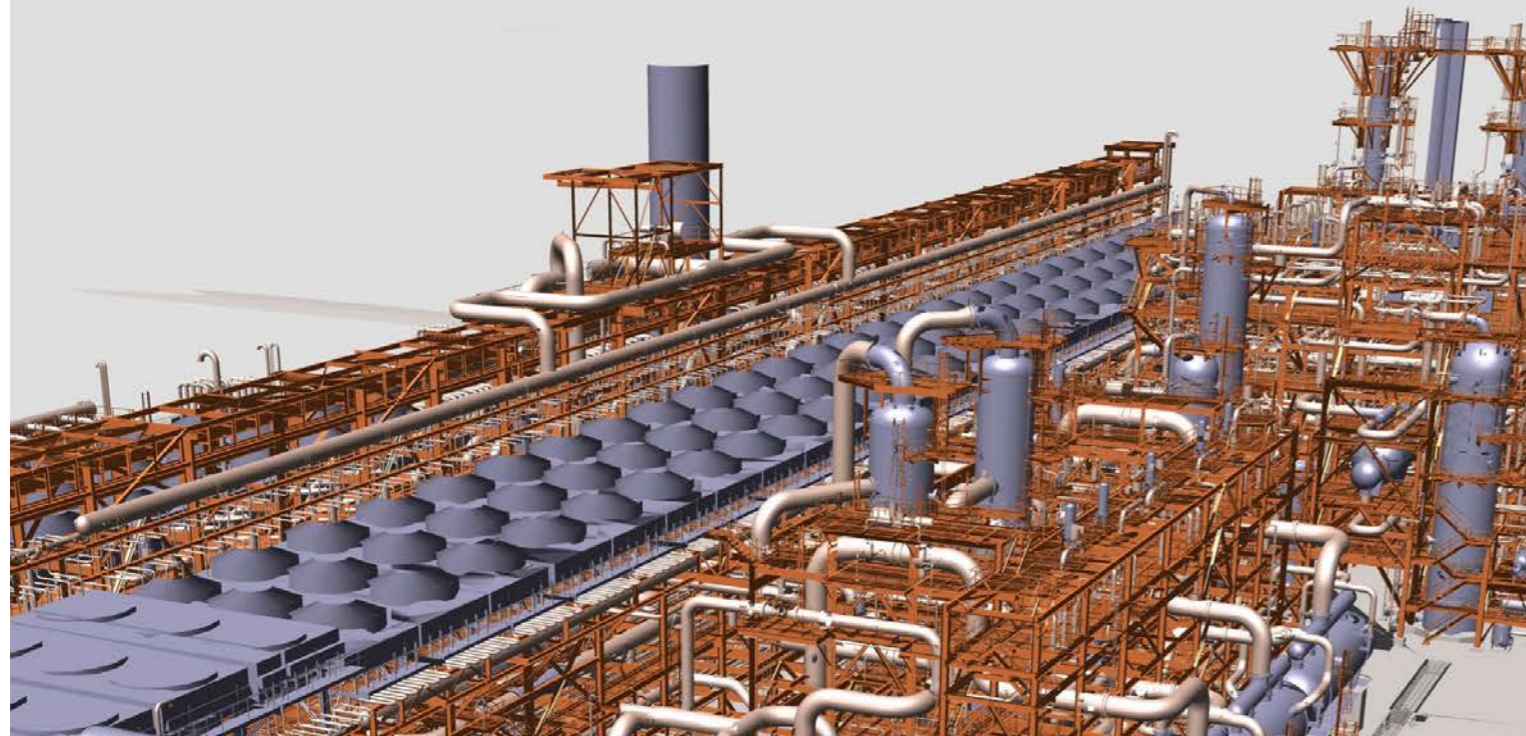


e2o is Australia's leading Multi-discipline commissioning contractor. The company provides an independent commissioning solution across the entire project lifecycle.



CH-IV provides consulting services to LNG asset developers, regulators, facility owners, operators and lenders to ensure assets are designed, constructed and operated safely, and in accordance with codes, regulations, and project specifications.

ENGINEERING



CLOUGH USES ADVANCED TECHNOLOGY AND A CENTURY OF ENGINEERING AND CONSTRUCTION EXPERTISE TO DELIVER A FULL SUITE OF ENGINEERING SERVICES ACROSS THE ENTIRE ASSET LIFECYCLE, FROM CONCEPT AND FEASIBILITY STUDIES THROUGH TO DESIGN, DELIVERY, AND LONG-TERM PRODUCTION OPERATIONS AND OPTIMISATION.

Our engineers design with a construction mindset to maximise safety, cost, quality and productivity outcomes during the construction and operations phases of a project.

Engineering services are incorporated into three delivery solutions:

- **Multi-discipline engineering** supports asset definition and execution planning requirements and includes FEED and detailed design services across process, mechanical, piping, pipeline instrumentation, electrical, civil and structural engineering disciplines.
- **Engineering and Project Management** covers all engineering requirements during the execution phase of a project including project management, project, field and package engineering, procurement support, cost estimating, constructability analysis and safety reviews.
- **Consulting Services** cover all asset planning, optimisation and sustainability solutions including concept, feasibility and select studies, basis of design, safety in design, geospatial services, process and plant optimisation and debottlenecking.

Our engineering model is enhanced by highly specialised engineering capability through CH·IV, who specialise in front-end LNG design, and Booth Welsh, who act as Clough's centre of expertise for electrical, control and instrumentation engineering.

OUR CAPABILITIES

Concept Evaluation

Regulatory Approvals

Project Feasibility Studies

Basis of Design

Front End Engineering Design

Detailed Design

Specialised Process Engineering Design

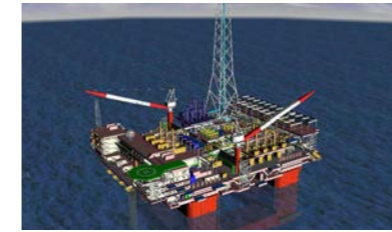
Engineering, Procurement, Construction and Project Management (EPCM)

Project Management Consultancy (and Services)

Process Optimisation and Debottlenecking

Brownfield Engineering

Electrical Controls and Instrumentation (ECBI)



ICHTHYS INTEGRATED PROJECT MANAGEMENT SERVICES

CLIENT
INPEX

LOCATION
Offshore Darwin, Northern Territory, Australia

CONTRACTING ENTITY
Clough DORIS

SCOPE
Integrated Project Management Services overseeing the detailed design, procurement, fabrication, commissioning, tow to site, and offshore hook-up of the Central Processing Facility and FPSO.



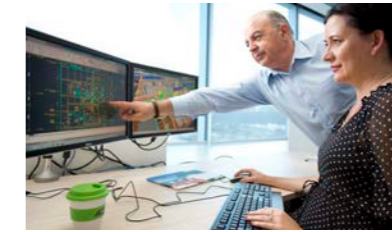
FREERTPORT LNG PROJECT

CLIENT
Freeport LNG

LOCATION
Texas, USA

CONTRACTING ENTITY
CH·IV

SCOPE
Engineering for Federal Energy Regulatory Commission (FERC) application to add a fourth LNG train; pre-FEED services and regulatory requirements to convert an LNG import terminal to a gas liquefaction and LNG export facility; balance of plant FEED for liquefaction facility.



TANGGUH EXPANSION PROJECT

CLIENT
BP Berau

LOCATION
Bintuni Bay, West Papua, Indonesia

CONTRACTING ENTITY
Clough

SCOPE
Basis of Design for a 3rd LNG train (T3), mechanical engineering studies and supporting scope development, definition and procurement.



MAGNOLIA LNG PROJECT

CLIENT
Magnolia LNG

LOCATION
Louisiana, USA

CONTRACTING ENTITY
CH·IV

SCOPE
Owners engineer contract providing technical and project execution support personnel to Magnolia, overseeing engineering, procurement, construction contractor KSJV, as the project moves through detailed design, construction, commissioning and start-up.



WOODSIDE LNG EXPANSION EPCM PHASE 4

CLIENT
Woodside Energy Ltd

LOCATION
North West Shelf, Australia

CONTRACTING ENTITY
Kellogg Joint Venture

SCOPE
Engineering, procurement and construction management (EPCM) services for the project's development of the LNG Train 4, Sulfinol Unit, Power Generation Unit, Other Utilities, Brownfields Interconnecting Racks, Tie-Ins, and Trunkline Onshore Terminal (Basis of Design (BOD) and front end engineering design (FEED) initially).



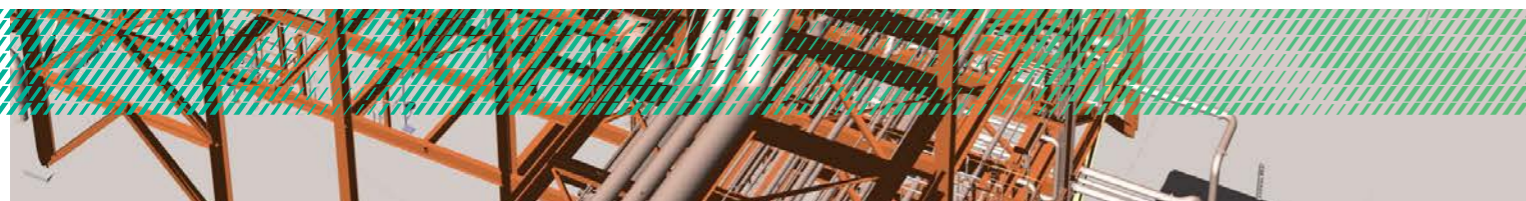
ARROW ENGINEERING SERVICES

CLIENT
Arrow CSG Australia

LOCATION
Queensland, Australia

CONTRACTING ENTITY
Clough AMEC Foster Wheeler CPE Arrow Joint Venture

SCOPE
Engineering Support, Concept Select, FEED and Execute Engineering as well as Procurement, Contract, Construction and Commissioning support services for the development of the client's Surat and Bowen Basin gas assets in Queensland



ONSHORE & OFFSHORE CONSTRUCTION



CLOUGH DELIVERS A COMPREHENSIVE RANGE OF CONSTRUCTION SOLUTIONS, FROM FULLY INTEGRATED EPC TO DESIGN AND CONSTRUCT AND CONSTRUCT-ONLY SOLUTIONS. INNOVATIVE SAFETY PROGRAMS, PROPRIETARY DAILY REPORTING SYSTEMS AND DISCIPLINED PROJECT MANAGEMENT ADD VALUE ACROSS THE ENTIRE CONSTRUCTION PHASE.

An unrelenting commitment to safety underpins all construction activities. Our Target Zero safety management program delivers strong safety performance through behavioural based safety training; leading edge major accidents and events risk management programs and a proactive leading indicator focus.

Construction services are supported through disciplined project execution methodologies, sophisticated project reporting systems and nine decades of project management experience. Clough also has more than 60 years' experience in joint venture and alliance contracting, resulting in a company culture that understands, embraces and integrates with valued partners to deliver outstanding solutions for clients and stakeholders in complex environments.

We employ highly skilled engineering, construction and project professionals and have access to a large talent pool of construction workers that are trained in our systems and project execution methods. Leadership positions on every Clough project are filled with highly qualified and experienced construction and project management professionals. Staff incentives are structured based on safety, cost and productivity performance.

Clough has also established a Project Manager's academy, with the aim of ensuring Clough certified project managers are recognised as the best in the industry.

OUR CAPABILITIES

Fully integrated EPC

Procurement

Fabrication

Design and Construct / Construct-only

Integrated partnerships and alliances

Small Scale LNG Facilities

Power Generation

Gas Plants & Compression Facilities

Pipelines

Water and Waste Water Facilities

Minerals Handling Facilities

Petrochemical Plants

Roads and Bridges

Control Systems



ENTERPRISE ETHYLENE DEHYDRATION UNIT

CLIENT
Enterprise Products Company

LOCATION
Mont Belvieu, Texas, USA

CONTRACTING ENTITY
Clough

SCOPE
Engineering, Procurement and Construction necessary to install facilities and equipment for a new ethylene storage and dehydration system. The new facility is located within Enterprise's existing Splitter III/ East Storage facility.



POM POWER STATION

CLIENT
NiuPower

LOCATION
Port Moresby, Papua New Guinea

CONTRACTING ENTITY
Warsila Clough

SCOPE
Engineering, procurement, and construction to develop the POM Power Station near Port Moresby in Papua New Guinea. The POM Power Station uses natural gas supplied by the PNG LNG project to feed six high efficiency Reciprocating Gas engines and generators.



GORGON PROJECT

CLIENT
Chevron Australia

LOCATION
Barrow Island, Western Australia, Australia

CONTRACTING ENTITY
Kellogg Joint Venture Gorgon (KJVG)

SCOPE
EPCM, as part of KJVG, for all downstream facilities on the Chevron-operated Gorgon Project – one of the world's largest natural gas projects.



K128 UPSTREAM FACILITIES

CLIENT
Santos / Fluor Australia

LOCATION
Surat Basin, Queensland, Australia

CONTRACTING ENTITY
Clough Downer JV

SCOPE
Construction of more than 400 kilometres of gas and water transmission pipelines, two compression facilities, six water storage dams an 800-person camp and expansion of the existing Fairview compression facilities.



AMMONIUM NITRATE/NITRIC ACID PLANT NUMBER 3

CLIENT
CSBP Limited

LOCATION
Kwinana, Western Australia, Australia

CONTRACTING ENTITY
Downer Clough

SCOPE
Project management, engineering, procurement, pre-fabrication, construction and pre-commissioning for the NAAN3 Ammonium Nitrate plant. The contract was awarded after successful completion of the ECI phase.



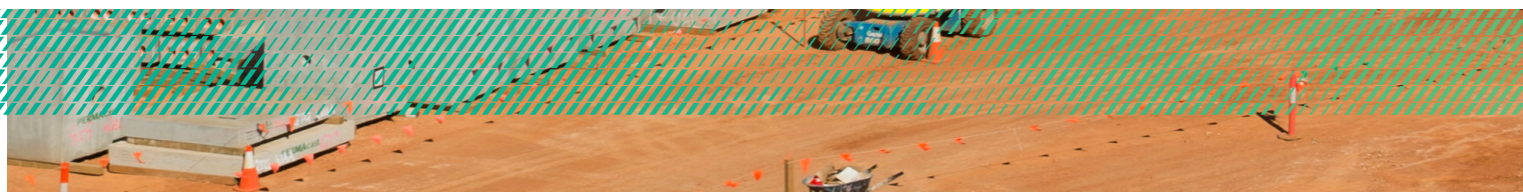
PNG LNG PROJECT HIDES GAS CONDITIONING PLANT

CLIENT
ExxonMobil PNG Limited

LOCATION
Hela Province, Papua New Guinea

CONTRACTING ENTITY
CBI Clough JV

SCOPE
Engineering, procurement and construction work for the gas conditioning plant, nearby wellpads and associated piping and infrastructure.



NEAR SHORE MARINE



WITH A HIGHLY REGARDED REPUTATION FOR DESIGN AND CONSTRUCTION, CLOUGH IS THE MARKET LEADER IN NEAR SHORE MARINE PROJECT DELIVERY.

Since 1964 Clough has combined worldwide resources with local project delivery expertise to deliver jetty and near shore marine projects for some of the world's largest energy and resource clients.

With a worldwide talent pool, state of the art design and construction methods, and technologically advanced equipment, Clough presents a low risk, high quality option for near shore marine challenges.

OUR CAPABILITIES

Import and Export Jetties

Jetty Topsides

Ports and Harbour Infrastructure

Quay Walls

MOFs

Intake and Outfall Structures

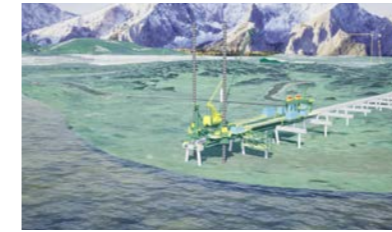
Regasification Terminals

Near Shore Pipelines

Tug Pens

Supply Bases

Marine Engineering



LNG CANADA LOADOUT LINE TRESTLE

CLIENT

JGC Fluor BC LNG Joint Venture

LOCATION

Kitimat, British Columbia, Canada

CONTRACTING ENTITY

Clough PPM Joint Venture

SCOPE

EPC for the 1.75-kilometre-long loadout line trestle for the LNG Canada project. The scope includes the engineering, procurement and construction of a piled trestle and installation of pipe racks to carry the LNG export pipelines from the LNG plant to the export berth.



KARRATHA GAS PLANT LIFE EXTENSION INTEGRATED MARINE

CLIENT

Woodside Energy Limited

LOCATION

Karratha, Western Australia, Australia

CONTRACTING ENTITY

BAM Clough

SCOPE

Project management and installation engineering associated with replacing existing equipment on two berths, including LNG and LPG marine loading arms, gangways and dolphin fenders.



WHEATSTONE PROJECT JETTY

CLIENT

Bechtel

LOCATION

Onslow, Western Australia, Australia

CONTRACTING ENTITY

BAM Clough

SCOPE

Design and construction of a 1.2 kilometre jetty with operations and product loading platforms, a single LNG and condensate loadout berth, and associated piping modules and piping installation.



ICHTHYS LNG PROJECT PRODUCT LOADING JETTY AND MOF

CLIENT

JKC Australia LNG Pty Ltd (JKC) (a joint venture between JGC Corporation, KBR and Chiyoda Corporation)

LOCATION

Darwin, Northern Territory, Australia

CONTRACTING ENTITY

BAM Clough

SCOPE

Design and construction of two separate vessel load-out berths, one for LNG carriers and a second for LPG / condensate carriers, and the MOF, a key facility for offloading modules to assemble the LNG liquefaction plant.



MALAYSIA MANUFACTURING PROJECT

CLIENT

VALE

LOCATION

Malaysia

CONTRACTING ENTITY

Murray & Roberts Marine

SCOPE

Design of a materials handling quay and management of construction for marine headquarters and jetty.



PNG LNG PROJECT MARINE JETTY

CLIENT

Bechtel Chiyoda JGC Joint Venture

LOCATION

Gulf of Papua, Papua New Guinea

CONTRACTING ENTITY

BAM Clough

SCOPE

Design and construction of a 2.4 kilometre trestle with substation platform, loading platform and single berth. Scope included fabrication and construction of the topsides.

COMMISSIONING



SUCCESSFUL COMMISSIONING PLANNING AND EXECUTION CAN REDUCE THE SCHEDULE AND COST OVERRUN RISKS PRIOR TO THE START-UP OF OPERATIONS.

Clough is Australia's largest commissioning contractor, offering integrated owner's commissioning solutions. We bridge the gap between construction and operations to enable safe and orderly asset handover, while minimising the risk of production downtime.

Our commissioning teams plan for commissioning requirements across the entire project lifecycle, from conceptual and detailed design through to procurement, construction, start up and handover. This service identifies and schedules commissioning requirements early, enabling timely detection and intervention on potential schedule delays. We also work with clients to ensure commissioning procedures are developed in line with operating needs.

Through its wholly owned subsidiary e2o, Clough has access to over 2,000 commissioning technicians across Australia and Asia.

Commissioning services are supported by sophisticated commissioning systems and an extensive database of blue collar resources that check, inspect and test every operational component of the asset prior to handover.

OUR CAPABILITIES

Completion Services

Hook-Up Services

Onshore and Offshore Pre-Commissioning and Commissioning

Supply of Technical Trades

Hazardous Area Inspection

Asian Fabrication Yard Support



WHEATSTONE PROJECT HOOK-UP AND COMMISSIONING

CLIENT
Chevron Australia

LOCATION
200 kilometres north of Onslow,
Western Australia, Australia

CONTRACTING ENTITY
Clough

SCOPE
Provision of an independent commissioning team to assist the client with pre-commissioning, commissioning of integrated float over deck systems, offshore hook-up, and start-up assistance.



APLNG UPSTREAM COMMISSIONING

CLIENT
Origin

LOCATION
Surat and Bowen Basins, Queensland,
Australia

CONTRACTING ENTITY
e2o

SCOPE
Commissioning, structural design and implementation of the completions/ commissioning management software (CCMS).



GLADSTONE LNG COMMISSIONING MANAGEMENT SERVICES

CLIENT
Santos

LOCATION
Surat Basin, Queensland, Australia

CONTRACTING ENTITY
e2o

SCOPE
Commissioning management services for the upstream field development, and commissioning of the pipeline for the upstream project.



GORGON COMMISSIONING

CLIENT
Chevron Australia

LOCATION
Barrow Island, Western Australia,
Australia

CONTRACTING ENTITY
Clough

SCOPE
Deployment of commissioning personnel to support commissioning of the downstream facilities.



ICHTHYS LNG HOOK-UP AND COMMISSIONING

CLIENT
INPEX

LOCATION
Western Australia, Australia

CONTRACTING ENTITY
Clough DORIS

SCOPE
Commissioning and hook-up of the CPF and FPSO.



COMMISSIONING SUPPORT ASIA

CLIENT
BP, Shell, Chevron, SSHI,
DSME, HHI

LOCATION
South Korea

CONTRACTING ENTITY
CloughCoens

SCOPE
The deployment of qualified commissioning technicians to support operators in the completions and commissioning of multiple offshore assets for various clients across the major fabrication yards in South Korea.



BROWNFIELDS



Clough provides a full range of operations and maintenance solutions to maximise the life and profitability of operating assets.

These solutions include production engineering, operational readiness, asset management, shutdowns and general maintenance planning and execution, and decommissioning.

Clough has a track record of successfully executing major shutdowns, turnarounds and maintenance programs for onshore and offshore oil and gas facilities. Our brownfield project management systems are designed to maximise workforce productivity while minimising facility downtime and cost through effective planning, scheduling, workpacking and job carding.

Our sophisticated competency assessment and training programs utilise a combination of classroom and e-learning systems that provide skilled and qualified operating staff. Clough can also develop operations procedures and operator training and development programs based on our client's requirements.

OUR CAPABILITIES

Operations Engineering

Reliability Modeling

Maintenance Management and Execution

Supply of Maintenance Trades

Shutdowns and Turnarounds

Operational Readiness

Supply Chain Management

Competency Assurance and Training

Sustaining Capital Projects (EPC)

IR Management

Decommissioning



WHEATSTONE PROJECT ORM

CLIENT

Chevron Australia

LOCATION

200 kilometres north of Onslow, Western Australia, Australia

CONTRACTING ENTITY

Clough AMEC

SCOPE

Developing the maintenance database, assuring operational readiness for the offshore facilities, development of operations procedures and training and development programs, and engineering and support services.



BAYU-UNDAN OPERATIONS AND MAINTENANCE

CLIENT

ConocoPhillips Australia

LOCATION

Timor Sea

CONTRACTING ENTITY

Clough AMEC

SCOPE

Operations and maintenance services for ConocoPhillips' Bayu-Undan facilities consisting of a floating storage, offloading facility and three fixed platforms. Recipient of the ConocoPhillips 2018 Supplier Recognition Award for 'Focus on Execution'.



BLACKTIP

CLIENT

ENI Australia

LOCATION

Northern Territory and Western Australia, Australia

CONTRACTING ENTITY

Clough AMEC

SCOPE

Provision of trades labour to support routine and campaign maintenance and supporting services including specialist consultancy services, Multi-discipline engineering, procurement, and management of subcontractors and fabrication.



OFFSHORE MAINTENANCE SERVICES

CLIENT

Woodside

LOCATION

North West Shelf, Australia

CONTRACTING ENTITY

Clough AMEC

SCOPE

Supply of maintenance and trades personnel for all of Woodside's Australian offshore oil and gas assets.



BARROW ISLAND ENGINEERING SERVICES

CLIENT

Chevron Australia

LOCATION

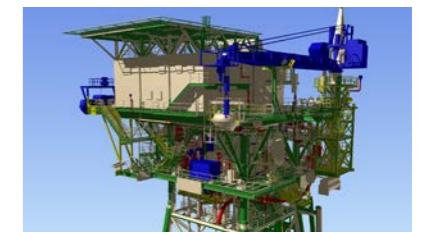
Barrow and Thevenard Islands, Western Australia, Australia

CONTRACTING ENTITY

Clough AMEC

SCOPE

Engineering Services Contract for Chevron's oil production facilities at Barrow and Thevenard Islands.



KUMUL TERMINAL REJUVENATION PROJECT

CLIENT

Oil Search PNG

LOCATION

Offshore Papua New Guinea

CONTRACTING ENTITY

Clough AMEC

SCOPE

Construction management and execution services for the rejuvenation of the Kumul Marine Terminal, located approximately 40km off the southern coast of PNG.

ZERO HARM IS A REALITY

SAFETY

We work sustainably and continue to set new safety and performance benchmarks every single day. While Clough's safety performance is significantly better than the global contracting industry average, we continue to work towards a workplace that is incident and injury free by driving safety leadership accountability and developing our people.

Our Target Zero safety program takes a full project lifecycle view on safety - from design through to execution and operations. We employ behavioural based safety programs across every phase of a project. Leading indicators play a key role in the measurement of our safety performance.

Clough's Major Accident Prevention (MAP) brings offshore safety case principles to the onshore construction environment. By analysing activities with potential for major accidents or events, and implementing critical controls, MAP provides lifesaving tools to provide real-time, line of sight management of potential major hazards.

SUSTAINABILITY

We aim to integrate sustainability throughout our global operations on a social, economic and environmental level.

Over and above the commitments stated in our HSE policy, we actively seek out ways to continually deliver on environmental initiatives for our clients and the communities in which we operate.

Our environmental management processes are embedded into our business delivery processes, championed by our environmental specialists and delivered by our management, engineering and project teams.

COMMUNITY

Clough embeds dedicated community relations professionals on our projects to implement programs that deliver tangible community benefits while achieving project objectives. Community engagement strategies are developed to facilitate community support and involvement, meet local stakeholder needs, minimise disruption and provide local and indigenous employment opportunities.

We understand the importance of giving back to the communities in which we live and work. Through Clough's dedicated Charitable Trust, The Clough Foundation, Clough supports a range of local community groups to provide sustained benefits to local communities, strengthen stakeholder relationships and encourage employee involvement in community initiatives.

SAFETY, SUSTAINABILITY & COMMUNITY

THROUGH THE TARGET ZERO AND MAP PROGRAMS, CLOUGH DELIVERS INDUSTRY LEADING SAFETY AND ENVIRONMENTAL PERFORMANCE WHILE PROTECTING AND GIVING BACK TO LOCAL COMMUNITIES THROUGH THE CLOUGH FOUNDATION.



KEY CAPABILITIES

Strong safety performance

Safety addressed across the asset lifecycle

Major Accident Prevention (MAP) Risk Management Program

Behavioural based safety programs fundamental to improving safety performance

Focus on leading as well as lagging indicators

Commitment to sustainability

Programs to engage and give back to the community

Best LTI free run: 555 days

Best TRI free run: 173 days

CLOUGH HAS ACHIEVED ZERO HARM ON RECENT ENERGY PROJECTS

PDM Power Station (Nui Power), Papua New Guinea
+1 million work hours / +600 days on site / zero injuries / zero environmental impacts

Karratha Life Extension (KLE) Marine Installation Services (Woodside Energy Ltd), Western Australia
91,617 work hours / 235 days on site / zero injuries / zero environmental impacts

Enterprise Dehydration Unit, Enterprise Products Company, Texas, USA
503,384 work hours / 365 days on site / zero injuries / zero environmental impacts

CLOUGH HAS ACHIEVED ZERO HARM ON SEVERAL OTHER RECENT PROJECTS

PNG Earthquake Response (Oil Search), Papua New Guinea
+270,000 work hours / +280 days on site / zero injuries / zero environmental impacts

Mundaring Outlet Upgrade Project (Water Corporation of WA), Western Australia
+66,133 work hours / 457 days on site / 1 first aid injury / zero environmental impacts

Alcoa Impurity Processing Facility EPC, Western Australia
211,084 work hours / 441 days on site / zero injuries / zero environmental impacts

BHP Mining Area C (MAC) Tunnel and Overpass, Western Australia
90,670 work hours / 329 days on site / zero injuries / zero environmental impacts

OkTedi Construction Support Services, Papua New Guinea
65,814 work hours / 119 days on site / zero injuries / zero environmental impacts

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